Quality Control

Work Order Wednesday, July 02	ID 121859 2, 2014 3:37:25 PM		*191	859*						Page 1
Revision ID:	3501-1 shing	•	Accept	*N900	<u>0</u> 40	100) * s	etup Sta Sto	171	S1* S2*
Start Date: 7/0 Required Date: 7/0 Reference:	02/14 Start Qty: 60.0 02/14 Req'd Qty: 60.0	,		Cust Item 1 Customer:	ID:				I	. 1/
	rocess Plan: <u>Mし</u> ろ		Tooling: SPC (Y/N):		ate:		R	tun Sta Sto	ь ~IЛ	R1* R2*
Sequence ID/ Work Center ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr				100					
D3501	Rev A									
*1 \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	Hardinge CNC LATH Memo 1-TURN REV:	IE SMALL AS PER FOLIO FA650 & DW DWG REV: A 2-	0.00 0.00 G D3501 ,FOLIO DEBURR AS REQUIRI	ED			60	Ø		DAS 44 9-89 14/07/(1
110	QC2- Inspect parts of	f machine FAI/FAIB	0.00				60	Ø		DAS 44 14/67/11
QC Quality Control	Мето		0.00							04s 13
120 *120*	QC8- Inspect parts - s	second check	0.00				60	ϕ		14-7-11
QC	Memo		0.00					,		

DQA:			Date:						D. 4 4 14 05 / 145	ND 4 TE			•	DART
QA Closed:			Date:			WORK ORDER NON	-CC	ONFO	RMANCE / UF		Vork Order up	odate only		AEROSPACE
Mark Orda		***	,		:	DISPOSITION				AGAINST D	EPARTMENT,	/PROCESS		
Work Orde	er: -					Rework			Skid-tube	Crosstube	7	Water Jet	Э,	ngineering
Part N	10					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	┨ ゙	Quality
raitiv	٠		<u> </u>			Use-as-is			noforming	Finishing	-	re/Packaging	┪ .	Other
NCR N	lo.					Suspected Unapproved		111011	Large Fab	Composite	1	Supplier	_	
	•										_			
Root		<u> </u>			Desc	ription of work order update	ı	nitial	Acti	on	Sign &			·
Cause	Ì	Date	Step	Qty		or non-conformance	Ch	ief Eng	Descri	iption	Date	Verification		QC Inspector
Design														
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Training														
Transport					,									
Unapproved	Ш		<u> </u>	<u> </u>	<u> </u>				TECODY		<u> </u>		l	
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Landir						General Bend		احمانه ۱	Program	Г	Outside Dim	ensions [Pro	essure/Forced
		Bending Centre No	ot Concor	atric	\vdash	BOM/Route	\vdash	Grain	riogram	ļ-	Over/Under	-	⊣	t-up
	-	Cracks	ot concer	ILTIC	-	Broken/Damage/Defect		Hardwa	aro	-	Part Incorre	F	_	mperature/Cure
;	_	Cracks Crimp/Kii	nk/Rinnla	/\/\/ava		Burrs	⊢	4	ion Incomplete/Un	gualified	Part Lost/M	<u>-</u>	_	eld
	_	Cuffs	iny nippie	/ wave	\vdash	Contamination	-	4	tions Incomplete/U	F-	Part Moved	-		rong Stock Pulled
		Crushing				Countersink	-	4	gned/off center	-	Positioned V	∟ Vrong		
	-	Heat Trea			 -	Cut Too Short	\vdash	Mislab	-	ļ-	Power Loss/		Ot	her
		Inspectio		Tube		Drawing	Г	Misrea		L.		- [
		Marks/Ch	•			Drill Holes		Off-set						
		Turning S				Finish		Out of	Calibration			_		
		Wave/Tw				Fit/Function		Out of	Sequence					

Stop Stop Stop Stop Stop Start Date: 7/02/14 Start Qty: 60.00 *60.** Cust Item ID: Customer:	Pa	1859*	*12				Work Orde Wednesday, July
Reference: Approvals: Process Plan: Date: Tooling: Date: Stop C: Date: SPC (Y/N): Date: Stop Tool ID Tool # Plan Accept Reject Reject Work Center ID Description Run Hours Run Start *NF Stop *NF *NF **NF *	14()1	Cust Item		*60*	- •	Bushing 7/02/14	Revision ID: Item Name: Start Date:
Approvals: Process Plan: Date: Tooling: Date: SPC (Y/N): Date: SPC (Y/N): Date: SPC (Y/N): Date: *NF Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Accept Reject Reject Work Center ID Description Run Hours Code Qty Qty Number	Run Start	 Customer:		*60* 	Req'd Qty: 60.00	7/02/14	_
Work Center ID Description Run Hours Code Qty Qty Number	^NH7				Plan:		Approvals:
130 Packaging Memo 0.00		Tool ID	Run Ĥours	ck Location	Description Identify as per dwg & Stoo)	Work Center II 130 *120*

140 '

QC21- Final Inspection - Work Order Release

0.00

140

Memo

0.00

Quality Control

MW 1407-14

26 9-89

DQA:			Date:			. WORK ORDER NON		201501	DAAANGE / HE	DATE.			"DAR"	Γ
QA Closed:			Date:			WORK ORDER NON	-C(JNFOI	RIVIANCE / UF		ork Order up	odate only	AEROSPAC	E
147l - Od						DISPOSITION				AGAINST DI	PARTMENT	/PROCESS		
Work Ord	er: ˌ					Rework	1		Skid-tube	Crosstube	7	Water Jet	Engineering	ł
Part N	N۵					Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.	Quality	l
, arei	10.		-			Use-as-is	1		noforming	Finishing	┥	re/Packaging	Other	l
NCR I	۷o.					Suspected Unapproved]		Large Fab	Composite		Supplier		
Root					Desc	ription of work order update		Initial	Acti	ion	Sign &			-
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descri	iption	Date	Verification	QC Inspector	
Design														
Doc/Data	Ш												1	
Equip/Tooling	Ш		:	•										
Handling/Pre														
Material	Ш										Ì			
Operator							1							
Offset/Setup														
Process			1											
Supplier	<u> </u>		ł											
Training	\vdash													
Transport	⊢		1	ļ										
Unapproved		L	1	i	l		FA	ULT CA	TEGORY			· · · · · · · · · · · · · · · · · · ·		_
Landi	ng (Gear		•		General								
	٦	Bending				Bend		Folio/F	Program		Outside Dim	ensions	Pressure/Forced	
		Centre N	ot Concer	ntric		BOM/Route		Grain	•		Over/Under	tolerance	Set-up	
		Cracks	ž.			Broken/Damage/Defect		Hardwa	are		Part Incorre	ci [Temperature/Cure	
		Crimp/Ki	nk/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Un	qualified	Part Lost/Mi	ssing	Weld	
		Cuffs				Contamination		Instruc	tions Incomplete/U	Inclear	Part Moved		Wrong Stock Pulled	t
<u>.</u>		Crushing				Countersink		Misali	gned/off center		Positioned V	Vrong		
*		Heat Trea	at			Cut Too Short		Mislab	eled		Power Loss/	Surge	Other	
		Inspectio	n Strip in	Tube		Drawing		Misrea	d		_			
		Marks/Cl	hatter			Drill Holes		Off-set						
		Turning S	Sequence			Finish	L	Out of	Calibration		 			
		Wave/Tw	vist in Tul	oe		Fit/Function		Out of	Sequence					

Page 1

Wednesday, July 02, 2014 3:37:24 PM

Work Order ID: 121859

121859

Parent Item:

D3501-1

D3501-1

Parent Item Name: Bushing

Start Date: 7/02/14

Required Date: 7/02/14

Start Qty: 60.00

Required Qty: 60.00

Comments:

IPP Rev:A New Issue 06-05-09 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch		rimary ocation	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303R0.750		Purchased	No		** • • • • • • • • • • • • • • • • • • 	100	f	63.9220	0.0791	5			
*N/1202D0	750 *								**				

^WK3O3HO /5O^

303 Round Bar 0.750

Location	Loc Qty	Loc Code	
MAT028	63.922	-	
m127464	46.782		
★ m128882	0.196	2.79	
m129366	16.944		DAS
F40F51.M *		1.9'	44 14/07/11 9-89

Could not pull mal! !

2 .

DQA:			Date:										TART
						WORK ORDER NON-	-CC	ONFO	RMANCE / UP	PDATE			AEROSPACE
QA Closed:			Date:							W	ork Order up	date only	
Work Orde	ar.					DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
WOIK OIG	٠'٠.					Rework			Skid-tube	Crosstube	1	Water Jet	Engineering
Part N	lo.					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	Quality
i	•					Use-as-is		Thern	noforming	Finishing	Rec/Stor	e/Packaging	Other
NCR N	Ю.					Suspected Unapproved			Large Fab	Composite]	Supplier	
Root					Desci	ription of work order update	ı	nitial	Acti	on	Sign &	_	
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descri	ption	Date	Verification	QC Inspector
Design													
Doc/Data													
Equip/Tooling													
Handling/Pre													
Material													
Operator		, ·	'C										
Offset/Setup													
Process													•
Supplier													
Training Transport													
Unapproved					ļ.								
-				1	L		FA	ULT CAT	TEGORY			·	
Landi	ng (Gear				General							
	Ť	Bending				Bend		Folio/F	Program		Outside Dim	ensions	Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance	Set-up
		Cracks				Broken/Damage/Defect		Hardwa	are		Part Incorre	ci [Temperature/Cure
ļ.		Crimp/Kii	nk/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Un	qualified	Part Lost/Mi	ssing	Weld
		Cuffs				Contamination		Instruct	tions Incomplete/U	nclear	Part Moved	Ĺ	Wrong Stock Pulled
,		Crushing				Countersink		Misalig	gned/off center		Positioned V	_	_
		Heat Trea	at			Cut Too Short		Mislabe			Power Loss/	Surge	Other
		Inspectio	n Strip in	Tube		Drawing		Misread					
		Marks/Ch	,			Drill Holes		Off-set					
		Turning S	-		<u> </u>	Finish		-	Calibration		<u></u>		
1		Wave/Tw	ist in Tub	oe -	1	Fit/Function		Out of	Sequence				

DART AEROSPACE LTD	Work Order:	121859
Description: Bushing	Part Number:	D3501-1
Inspection Dwg: D3501 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

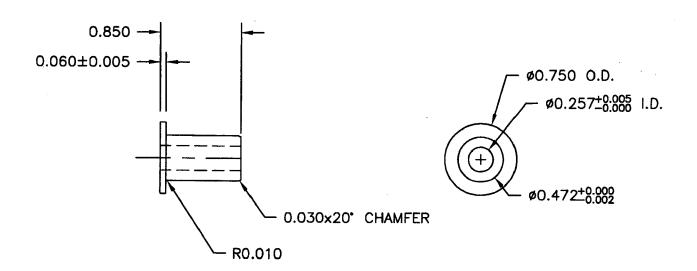
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
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0.060	+/-0.005	061	1		h	h
Ø0.750	+0.008/-0.001	5749			n	'n
Ø0.257	+0.005/-0.000	.258			1.	*
Ø0.472	+0.000/-0.002	.471			Mic	FR OG.
						,

Measured by: 44
9-89
Date: 14-7-11
Date: N/A

Rev	Date	Change	Revised by	Approv <i>e</i> d
A	06.10.27	New Issue	KJ/JLM	

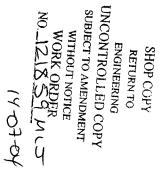


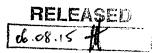
DESIG	P	DRAWN BY		OSPACE LTD ONTARIO, CANADA
CHEC	KED #	APPROVED M	DRAWING NO.	REV. A
l	4	TH	D3501	SHEET 1 OF 1
DATE			MLE	SCALE
06.0	04.18		BUSHING	1:1
A		06.04.18	NEW ISSUE	



D3501-1 BUSHING

- 1) MATERIAL: AISI 303 SS (REF DART SPEC. M303R)
- 2) FINISH: NONE
- 3) BREAK ALL UNMACHINED SHARP CORNERS 0.010 MAX
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES





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